

U.S. Environmental Protection Agency

Hawaii Department of Agriculture

FY2014 Final End-of-Year Review

Pesticide Performance Partnership Grant

Executive Summary- This report covers workplan activities conducted in FY14, and is based on discussions and review of documents throughout the year and during the end of year visit. Discussions were held during the end of year visit that focused on recent changes to the pesticide program at Hawaii Department of Agriculture (HDOA). Recommendations for improvements can be found within the body of this report. Recommendations focus primarily on reducing a backlog of inspection files (several hundred) that need review. HDOA should also focus on revising the enforcement response policy, and increasing the number of WPS Tier 1 inspections to more closely match numbers in previous years. Highlights include a successful pilot school IPM program initiated at a local elementary school. The pilot is likely to lead to broader implementation of IPM in schools throughout Hawaii. This report covers the final year of a three-year performance partnership grant between Hawaii Department of Agriculture and EPA Region 9. This grant was put into place to ease administrative burdens on HDOA and to allow for more long-term planning for the Pesticide program. Thomas Matsuda completed his second and final year as the regional representative to the State FIFRA Issues Research and Evaluation Group (SFIREG).

I. BACKGROUND

A. General

- 1. Project Period:** October 1, 2013 – September 30, 2014.
- 2. EPA Assistance Agreement Number:** #BGOOT64412-2
- 3. Review method:** On-site
- 4. Review participants:**

EPA: Mary Grisier, Hawaii Pesticide Project Officer
Grantee: Thomas Matsuda, Pesticide Program Manager, Avis Onaga, Case Preparation Officer, and Dean Yoshizu, Compliance Officer
- 5. Review date(s) and location:** November 17-20, 2014 at the Hawaii Department of Agriculture offices in Honolulu.

B. Scope of Review

The Hawaii Department of Agriculture (HDOA) has primary enforcement responsibility over pesticide use activities in the State of Hawaii and is the lead state agency for the enforcement of the Hawaii Pesticides Law (Chapter 149A, Hawaii Revised Statutes) and the Hawaii Administrative Rules (Chapter 66, Title 4). There are approximately 1,110,000 acres in farmland, 7,500 farms, 6,400 agricultural workers, 3,800 Agricultural Operators, 1,200 certified applicators, 22 licensed Restricted Use Pesticide (RUP) dealers, 18 pesticide producing establishments, and seven licensed aerial applicators in

the state of Hawaii. Major crops in Hawaii include seed corn, coffee, papaya, macadamia and nursery plants. Average farm size in Hawaii is 150 acres. HDOA maintains a database of all pesticides licensed in Hawaii. The HDOA Pesticide program consists of approximately 14 individuals over 4 islands performing inspection, education, registration, administrative, and other pesticide program activities.

The Hawaii Pesticide program is supported by both State (general and revolving) and federal (USDA and USEPA) funds. HDOA and USEPA Region 9 had one active Performance Partnership Grant (PPG) with pesticide related activities to be carried out in Federal Fiscal Year 2014. The purpose of the PPG is to reduce paperwork and provide administrative relief and flexibility to HDOA. FY14 was the third year of a three-year agreement.

The FY14 end-of-year evaluation was primarily accomplished by reviewing quarterly reports and correspondence received from HDOA throughout the year, and an on-site visit by Mary Grisier, project officer for HDOA. Information gathered was compared to the outputs and standards in the cooperative agreements to determine if HDOA had met its commitments.

II. FINANCIAL

A. Budget Analysis

The following table summarizes funding and expenditures for the FY14 cooperative agreement. In FY14, approximately three FTE were supported by EPA funding (Inspector, Pesticide Specialist, and Chemist).

Final Financial Status Reports (FSRs) for FY14 were received and indicated that HI Department of Agriculture drew down funds in an appropriate manner.

Work Plan Component	EPA Funding	Grantee Funding*	Total Funding
Enforcement	\$186,200	\$35,745	\$221,945
Programs	\$116,125	\$20,930	\$137,055
C&T	\$ 30,000	\$30,063	\$ 60,063
Supplemental \$	\$ 94,600	\$ 9,945	\$104,545
TOTAL	\$426,925	\$ 96,693	\$523,618

* State is required to provide 50% match in C&T, 15% (by policy) for other programs.

Re-budgeting –There was no re-budgeting in FY14.

III. GENERAL GRANT ADMINISTRATION

A. Recommended Actions for Grants Office - None

IV. COMPLIANCE AND ENFORCEMENT

A. Grantee Reports

1. **Summary of 5700-33H reports** – attached as Appendix 1.
2. **Annual Summary of Inspections and Enforcement Actions**

HDOA exceeded the number of projected inspections (307 projected, 388 completed). This is approximately 42 fewer inspections conducted than in FY13. It should be noted that a senior inspector on the island of Hawaii retired in December, 2013. This is a factor in the inspection shortfall for FY14. HDOA issued one civil complaint in FY14. Forty two warning letters were issued, up from 20 in the previous year, and one case was assessed a fine in FY14, versus three in FY13. There were eight inspection files referred to EPA for enforcement review and possible development in FY14, while there were none forwarded in FY13.

B. Case File and Enforcement Action Evaluation

1. Significant Cases (FIFRA Section 27)

There were three high level episodes referred to HDOA in FY14. For all three of the incidents, violations were found and warning letters were issued. EPA was given proper notification before warning letters were issued. It is interesting to note that two of the incidents involved the improper use of malathion by a private citizen. Over the past several years, this type of misuse has occurred often, leading to legislation being introduced by a senator in the current session to make it a felony to “cause harm to human health or the environment” through use of pesticides. As of this writing, the legislation was still pending.

2. Routine Inspections – other than Worker Protection

Forty inspection files were reviewed during the end of year visit, in addition to files that were sent to EPA for enforcement/review. Inspection files were randomly selected from actionable and non-actionable inspections. Inspections selected represented the work of six different inspectors. Inspections continue to document compliance/non compliance with pesticide laws, and in most cases include necessary evidence such as photographs, labels and invoices. It should be noted that by the time the project officer reviews inspection files, they have been reviewed and errors have been corrected by the HI case developer or the inspector. Discussions with the case developer indicate that inspectors, in general, need to continue to pay closer attention to ensuring that reports are clearly written, grammatical errors are corrected, and that reports are “enforcement ready”. HDOA forwarded eight inspection files to EPA during FY14 for review and possible

enforcement action. Eleven additional files were sent in early FY15. These were forwarded to EPA's enforcement division for review.

There were no Special Requests issued to HDOA during FY14. HDOA did not complete any container/containment inspections, as there are no facilities currently identified in Hawaii that meet the necessary criteria. The Pesticide Container/Containment Inspection and Enforcement Accomplishment Report (EPA C/C Form 5700-33H) is included in Appendix 2.

1. Oversight inspections (non-WPS) - none

C. Compliance Priority – Worker Protection Standard (WPS)

1. Reports

a) The Pesticide Worker Protection Standard Inspection and Enforcement Accomplishment Report (WPS Form 5700-33H) is included in Appendix 3.

2. Significant WPS Cases (FIFRA Section 27) - none

3. WPS oversight inspections – none

4. WPS case file evaluation

HDOA conducted five WPS Tier 1 inspections at establishments throughout Hawaii, continuing a trend down from ten in FY 13, and down from forty in FY12. There were no enforcement actions issued for any Tier 1 inspections conducted in FY14. Five Tier 2 inspections were also conducted, up from two the previous year. HDOA needs to increase WPS inspection numbers throughout Hawaii as recommended in FY13. Inspectors should work towards increasing their numbers of both Tier1 and Tier 2 inspections in the current year.

5. Worker Protection Risk-Based Targeting Strategy

a) Implementation of Risk-Based Targeting Strategy

A WPS targeting strategy was developed in 1994. Targeting was based partly on how many restricted-use pesticides were purchased by growers, as well as how many workers were employed by the establishment. Since that time, agriculture has changed dramatically in Hawaii. The number of large farms with many workers has greatly decreased. Farms are smaller (average farm size is 150 acres) and growers buy smaller quantities of pesticides. Inspectors have found that they can identify establishments that fall under the WPS by conducting routine agricultural use inspections and asking questions related to worker activity during the inspection. They will then return at a later

date to conduct a WPS inspection. Larger establishments are inspected approximately every two years.

D. Inspection and Enforcement Support

1. Training

HDOA conducts an annual pesticide training workshop for all HDOA Pesticide Program staff (inspectors, education, and registration staff) and outer Pacific Island pesticide programs in November of each year. The workshop also includes medical monitoring and respirator fit-testing for inspectors. The project officer attends this workshop, in conjunction with the end of year visit. The project officer presented updates from EPA, including revisions to the Worker Protection Standards. The FY14 workshop was designed with training and collaboration in mind. Inspectors spent a full week together, conducting inspections, meeting afterwards to discuss results, and focused on training, report writing and other field exercises.

In FY14, HDOA had six federally-credentialed inspectors. Training records were properly maintained at the Honolulu office, and inspectors had met the commitments outlined in the FIFRA inspector credential authorization agreement. A new inspector was credentialed in August, 2014. It should be noted that the four inspectors, below, need to begin the process to renew their credentials that expire on November 1, 2015. Inspectors should consult EPA's inspector Wiki site at <https://wiki.epa.gov/inspector> for information on annual refresher requirements for maintaining a federal credential.

Steven Ogata	Credential No. 10093
Lester Chin	Credential No. 10092
Christopher Gerken	Credential No. 10090
Ann Kam	Credential No. 10089

Below is a partial list of training courses attended by HDOA staff in FY14:

TRAINING/MEETING	DATE
Structural PIRT - WA	3/2014
Ag Leadership - DC	4/2014
ALSTAR(Accepted Labels States Tracking and Repository)	4/2014
WRPM - Seattle	5/2014
PIRT for New Inspectors	5/2014
ASPCRO (Structural Conference)	8/2014
ALSTAR/NPIRS Conference	9/2014

2. Enforcement Response Policy

The Hawaii Department of Agriculture revised and adopted its Pesticide Enforcement Action and Penalty Assessment Schedule on October 24th, 2006. Review of case files indicates that HDOA follows its enforcement response policy, however there are numerous areas where the policy is in need of updating. In FY14, The Department of Agriculture completed the task of filling positions on the Governor's Pesticide Advisory Committee, which will take up the issue of revision of pesticide regulations in Hawaii, as well as the enforcement response policy. HDOA is encouraged to continue to identify those areas that are lacking in the ERP, so that at a future date, changes can be made.

3. Neutral Inspection Scheme

Applicators that are likely to use more RUPs are inspected more frequently than those that do not. This is based on amounts of RUPs purchased divided by the number of applicators employed by a business. With regard to marketplace inspections, they are conducted primarily based on complaints, rather than through a neutral inspection scheme. This has been discussed during previous reviews as an area for additional focus by HDOA. HDOA should consider whether these overall approaches to targeting inspections are still appropriate and effective.

4. Inspection and Enforcement Procedures

Discussions were held throughout the year between HI inspection staff and EPA as procedural issues arose. HDOA has revised the Branch Standard Operating Procedures, which includes neutral inspection procedures. HDOA has one case development officer that reviews all files as they come in from the inspection staff. During FY14, HDOA assigned an inspector to assist the case developer in reviewing files. This action was very helpful in working through many files that were old or had no violations. This inspector is currently on maternity leave, but will continue to assist when she returns.

In addition, we reported last year that the more serious cases that lead to civil complaints are sent to the deputy attorney general's office for review and concurrence. The deputy AG's office also has a backlog of civil cases to review, which results in penalty actions not being issued. Currently, there are at least ten civil complaints in the deputy AG's office awaiting review, dating back to 2012. The Pesticide Program has at least 20 additional complaints waiting to be submitted. In early FY14 the Deputy AG's office hired an assistant as well, and while she was very effective, she took another position after only a few months. There are still a large number of civil complaints to be developed at the AG level. Legislation was passed in FY14 to fund an additional case developer for the Pesticides Branch. This position will be filled in FY15.

5. Quality Assurance

HDOA's Pesticide Program QAPP was approved by EPA on February 24, 2014. The Chemical Analysis Laboratory operates a state-of-the-art pesticide residue laboratory for the analysis of a wide range of plant, soil, product and environmental samples in support of enforcement and registration activities. In 2014, the Hawaii Department of Agriculture Laboratory (Lab) participated in the Pesticide Residue Check Sample Program administered by the State of Wisconsin Department of Agriculture. The Lab

received soil samples in March 2014 and plant samples in November 2014. Hawaii's results initially came back high for the organophosphates in soil, but it was discovered that there was a miscalculation in the mass of the soil, so it was easily rectified. Results for the fall sampling program were acceptable.

6. Special Activities

In cooperation with EPA, HDOA is providing ongoing support to outer Pacific island pesticide program staff on import, inspection, enforcement, and certification issues. As in previous years, HDOA extended an invitation to outer island inspectors to attend the Inspector Workshop. Attendance at the workshop provided an opportunity for the inspectors to receive medical monitoring exams and respirator fit tests, as well as to participate in mock inspections with fellow inspectors and to receive important training.

In April 2014, HDOA received approval from Governor Abercrombie to develop an Integrated Pesticides Information System within the Pesticides Branch that will include the enforcement, registration and certification programs, as well as the Chemical Analysis Laboratory. Once implemented, this system will allow staff from all programs to coordinate their activities, and will also provide greater access to pesticide information by the public. A demonstration of progress to date was provided during the inspector workshop in November. Several key staff members are involved in the development of this system.

In FY14, HDOA received laboratory funds in the amount of \$41,600 from EPA. These funds are provided to states on a rotating basis, and can be used to update equipment needed for pesticide sampling and analysis. HDOA purchase several pieces of equipment with these funds, including a diode-array detector for the liquid chromatograph; liquid chromatograph chem-station upgrade; geno/grinder plant & animal homogenizer, and a nitrogen generator.

HDOA received one-time funding in FY14 in the amount of \$8,000 to develop informational booklets with IPM curriculum to be distributed to elementary-age students. The goal was to ensure that the message of IPM is brought home to parents, using, in some cases, Hawaiian words to ensure understanding among family members. This project was started, but has not yet been completed. HDOA plans to use State funds to complete this project.

E. New Legislation and Regulations

One pesticide-related piece of State legislation was passed in FY14. SB 2110 (SD2 HD1) added four new positions for the Pesticide Branch of HDOA. Those positions will include one case developer and three inspectors (for Kauai, Oahu and Hawaii).

F. Action Items from Previous Reviews

Recommendation 10-02: HDOA should review their enforcement penalty policy and identify areas that need revision or update.

Status: This was discussed during the end of year review, and during the FY15 cooperative agreement negotiations. HDOA understands where the penalty policy has weaknesses and/or is problematic, and plans to strengthen this and other parts of HI's pesticide rules in the near future. These changes will require a formal change in Hawaii's Pesticide Law, and must be initiated by the Advisory Committee on Pesticides.

Recommendation 10-03: HDOA should develop a neutral scheme for conducting marketplace inspections. One approach would be to select an EPA priority area (such as products that make public health claims) to create a neutral inspection scheme.

Status: This recommendation remains in effect; HDOA should review its targeting strategies to ensure that they are still effective.

Recommendation 13-01: HDOA must forward inspections to EPA that either 1) were conducted with a Federal credential, or 2) reveal a potential federal violation.

Status: Eight files were sent to the Regional Office during FY14 for review and possible enforcement. This does not reflect all of the inspections that were conducted with a federal credential or that potentially have federal violations. There remains a large backlog of inspection files. This recommendation remains open.

Recommendation 13-02: HDOA has seen a downward trend in overall inspection activity in FY13, especially with regard to WPS Tier 1 inspections. HDOA should make every effort to increase the number of WPS Tier 1 inspections in the coming year.

Status: A downward trend continues for HDOA, as only five WPS Tier 1 inspections were conducted in FY14.

Recommendation 13-03: HDOA should formally request that EPA send the enforcement liaison to the upcoming November workshop at the HI Department of Agriculture. This will ensure that state inspectors are provided the most up-to-date requirements for their work under the cooperative agreement.

Status: HDOA did request that the enforcement liaison attend the inspector workshop. Unfortunately, the EPA enforcement division was not able to send the liaison to the workshop.

Recommendation 13-04: HDOA must identify ways to address the backlog of inspection files, whether through assigning inspection staff to review files or hiring additional case developers. Solutions to the backlog that also exists with cases at the Deputy Attorney General's office must also be identified. (NOTE: At the time of this writing, HDOA had assigned inspection staff to assist in reviewing inspection files, in order to decrease the backlog.)

Status: Having the additional inspector to help with file review has been very helpful to the case developer. When the inspector returns, she will continue to help out with file reviews. Legislation passed in FY14 will also bring a new case development position to the branch.

Recommendation 13-05: HDOA is asked to identify those policies and documents in need of revision and a plan put in place to make the necessary updates. (NOTE: At the

time of this writing, several changes had been put in place, including additional personnel to review inspection files, and the AG's office had also hired an assistant to focus on pesticide civil cases.)

Status: Unfortunately, the deputy AG's office was not able to retain the assistant, so again there is only one attorney currently working on Pesticide cases in that office.

Recommendation 13-06: HDOA should ensure that the POINTS system is updated on a yearly basis, and that progress is made in evaluating pesticides of interest to Hawaii.

Status: POINTS database had not been updated at the time of this writing. HDOA should ensure that the POINTS database is updated.

F. Conclusions and Recommendations for Compliance/Enforcement

EPA continues to have significant concerns with the backlog of inspection files to be processed, and the resulting lack of enforcement actions issued, as well as the lack of inspections forwarded to EPA for review/enforcement.

V. PROGRAMS

A. Worker Safety – C&T

1. Previous Recommendations - none

2. Accomplishments

a) Work-Plan Commitments & National Program Priorities

HDOA had 1058 certified commercial and 317 private applicators at the end of FY14, a total that has decreased by over 100 from FY13. HDOA administered exams and reviewed 180 courses for continuing education units, compared to 199 the previous year. HDOA also provided 19 presentations to certified applicators during the course of the year, down from 37 the year before. Honolulu staff covered exam administration and consultative visits on Oahu, Kauai, Maui and Molokai. The island of Hawaii is covered by an additional employee based in Hilo. Fourteen courses were monitored by HDOA in FY14. Certification reporting in CPARD was completed by HDOA in a timely manner.

HDOA's databases for certified applicators as well as for tracking continuing education units are cumbersome and not integrated. Once implemented, the Integrated Pesticides Information System will allow the Education staff to manage and review courses, track classes, exam results and credits, as well as produce quarterly reports on all certification and training activities. This database will ultimately be an important and timesaving tool for staff.

HDOA worked closely with the Cooperative Extension Service (CES), meeting at least twice per year with representatives from CES Pesticide Applicator Training Program, at the University of Hawaii. HDOA also meets with the Hawaii Pest Control Board, which

reviews and approves applications for new pest control businesses in the state. University personnel travel to each of the neighbor islands to prepare applicators in core topics for the certification exam on a yearly basis. The University of HI is currently revising the core exam to make the questions more applicable and connected to the study material that applicators use to prepare for the exam.

Certification cards issued in Hawaii currently have a photo ID and bar code. Annual C&T Plan Reports for Hawaii and other states are available at: <http://cpard.wsu.edu/>

3. PART Review Measures - none

4. State/Tribe Feedback - none

5. Conclusions and Recommendations

All negotiated outputs have been satisfactorily met for FY14.

B. Worker Safety - WPS

1. Previous Recommendations - none

2. Accomplishments

a) Work-Plan Commitments & National Program Priorities

HDOA conducted 18 WPS training sessions, reaching 73 participants. Eight consultative visits were also held, and are scheduled when a new applicator becomes certified, or, if an applicator has received a notice of warning. A visit may be made to ensure that the applicator has subsequently come into compliance. HDOA is also responding to a recent increase in Chinese and Laotian immigrant farmers on Oahu by providing pesticide safety and WPS training at key locations. HDOA also provided outreach using the updated How to Comply Manual to agricultural establishments. HDOA meets several times per year with the University of Hawaii Cooperative Extension and the Pest Control Board of the Department of Commerce and Consumer Affairs to discuss training and WPS issues. In FY14, HDOA held several Farmer Resource Workshops, designed as a “one stop shop” for farmers to obtain information on a wide range of topics. Topics range from proper pesticide use, agriculture loans and insurance, to soil conservation and air pollution regulations. These workshops have been held on Oahu, Hawaii, Maui and Kauai, and have been well-received.

In FY13, HDOA received special one-time funding to develop a slideshow which would be translated into several languages (Ilocano, Laotian, Mandarin, Cantonese and Tagalog) to provide workers and handlers with pesticide safety information. At the time of this writing, the slideshow was in the editing phase, and near completion in all languages. HDOA hopes to complete this project in FY15 using state funds.

The agricultural landscape in Hawaii has changed from the dominance of sugar cane and pineapple plantations to many small farms where ethnically-diverse owners grow a

multitude of minor crops. In FY12, the second highest violation found by HDOA inspectors was application of pesticides to crops not on the label. HDOA received special one-time funding in FY14 in the amount of \$45,000 to develop a cross reference of minor crops, including plant identification, synonymous names, related species and crop grouping. The ultimate goal was to assist in locating pesticides registered for use on these crops, if any. Some progress was made on the project, but most of the funding was returned to EPA. HDOA does plan to restart work on the project using state funding.

3. PART Review Measures - none

4. State/Tribe Feedback - none

5. Conclusions and Recommendations

With the exception of the two special projects, all negotiated outputs have been satisfactorily met for FY14.

C. Water Quality

1. Previous Recommendations - none

2. Accomplishments

a) Work-Plan Commitments & National Program Priorities:

At the end of FY14, the Pesticides of Interest Tracking System (POINTS) had not been updated, but it was completed in early 2015. HDOA has evaluated 51 of 73 Pesticides of Interest (70%), is actively managing 16 of 17 Pesticides of Concern (POC; 94%) and is demonstrating progress for 10 of managed POCs (63%). HI evaluated several products for ground water concerns during FY14, including EPTC, cyantraniloprole and cyproconazole, for example. HDOA uses modeling to determine whether new chemicals may have the potential to leach into groundwater. Restricted use pesticide sales records are monitored to identify products that may affect water quality. HDOA has discussions with HI Department of Health (DOH) as well as registrants to discuss pesticides of concern for surface and ground water. The HI Department of Health is responsible for implementing the pesticides NPDES permit program in Hawaii.

3. State/Tribal Concerns - none

4. Conclusions and Recommendations

D. Endangered Species

1. Previous Recommendations - none

2. Accomplishments

a) Work-Plan Commitments & National Program Priorities

HDOA continues to consult and coordinate with other State agencies on Section 18 emergency exemption requests and special local needs registration applications. During FY14, an Endangered Species Act (ESA) Section 7 informal consultation was sent to EPA for four pending SLNs for use of rodenticides in agricultural and forest/other island areas.

3. PART Review Measures - none

4. State/Tribe Feedback – none

5. Conclusions and Recommendations

All negotiated outputs have been satisfactorily met for FY14.